

be distinguished in the form of a simple vascular loop: the limbs are still styliform; but the proper movements of the young animal are already manifested when the egg is pressed.

On the fifth day the heart, as well as the branchiæ, are visible to the naked eye. The circulatory system has become perfect.

On the sixth day the feet are well formed, and the toes appear. The tail, on the contrary, shows signs of atrophy. The branchiæ are still perceptible; but their absorption has also commenced.

On the seventh day the branchiæ have disappeared, and the tail withers and folds.

On the eighth day the coloration, which began to show itself on the fifth day, increases throughout; and even some markings are produced at certain points. The tail disappears, and then the vessels which nourished it.

On the ninth or tenth day the eggs hatch. The vitellus, which is pretty voluminous in the young tree-frog, is still very visible through the walls of the abdomen; but this does not prevent the animal from leaping and being very free in its movements.

During incubation the gelatinous mass interposed between the chorion and the vitellus swells up considerably, so that the diameter of the egg becomes as much as 6 millims. When one of these greatly inflated eggs is opened there issues from it a considerable quantity of a clear liquid, in which the young animal floated.

M. Bavay puts forward the supposition that nearly pure water penetrates through the chorion into the cavity occupied by the embryo and its vitellus, and that it is in this water that the rotatory and voluntary movements of the embryo are performed. It would be in this aerated liquid that it would respire—at first by its branchiæ, and afterwards by the whole surface of its blastoderm. Respiration would be effected especially, during this second phase, by vessels which, starting from each side of the neck, pass into the vitellus, at the surface of which they develop abundant ramifications. A remarkable fact is that the appearance of these vessels coincides with the commencement of the withering of the branchiæ.—*Revue des Sci. Nat.* tome i. 1872, p. 281, and *Journ. de Zool.* tome ii. 1873, p. 13; *Bibl. Univ.* June 15, 1873, *Bull. Sci.* p. 155.

Mode of Walking of the Armadilloes.

Mr. Bartlett has kindly examined for me the way of walking of the living armadilloes in the Zoological Gardens. He observes that *Chetophractus villosus* and *C. vellerosus* walk on the tips of their toes like *Xenurus*. *Euphractus minutus*, belonging to the same family as the preceding, and *Tatusia peba*, *T. hybrida*, and *Praopus Kappleri*, belonging to the family Tatusiadae, walk on the palms of the fore feet, with the claws spreading out and the tips elevated from the soil.—J. E. GRAY.